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## A Review of the Genus *Sympiezorhincus* Spinola (Heteroptera, Pentatomidae, Discocephalinae)

BY MIRIAM BECKER<sup>1</sup> AND HERBERT RUCKES<sup>2</sup>

The present paper was initiated by the late Dr. Herbert Ruckes, and completed by the first author, on the suggestion of Dr. P. Wygodzinsky, of the American Museum of Natural History. All illustrations were made by the first author.

It has not been possible to ascertain whether Dr. Ruckes had the opportunity to examine the holotypes of the two known species of the genus. Unfortunately, only one specimen of each sex of *Sympiezorhincus tristis* Spinola was available for study, and both had the antennae and the rostrum partially broken. On the other hand, a representative series of *Sympiezorhincus punctipes* Dallas was examined, and consequently the mean and extremes of measurements from five individuals of each sex are included in the present paper. The specimens on which the study of the morphological characters and descriptions of the genitalia are based belong to the Department of Zoology, Secretaria de Agricultura, São Paulo, Brazil, and the Department of Entomology, the American Museum of Natural History, New York.

The morphological terms proposed by Dupuis (1955, 1963) for the

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description of the male and female genitalia were adopted here. The genitalia were studied after being boiled in a 10 per cent solution of KOH, cleared in phenol, and stained in Congo Red.

*SYMPIEZORHINCUS* SPINOLA

*Sympiezorhincus* SPINOLA, 1837, p. 284. HERRICH-SCHAEFFER, 1844, p. 47. STÅL, 1867, p. 500. LETHIERRY AND SEVERIN, 1893, p. 87. KIRKALDY, 1909, p. 218.

*Rachava* AMYOT AND SERVILLE, 1843, p. 114.

TYPE SPECIES: *Sympiezorhincus tristis* Spinola.

DIAGNOSIS: Head with anteocular spinous process. Pronotum subtrapezoidal, anterolateral margins entire, sinuate; anterior margin wider than head through eyes.

GENERIC CHARACTERS: Obovate, slightly convex above and more strongly so beneath.

Head subtriangular, about two-thirds of median length of pronotum. Anteocular portion one-third shorter than width between apical margins of eyes; each side with acute anteocular spinous process. Margins of head slightly elevated and gradually converging to narrowly rounded apex, which is a little longer than clypeus, and apically contiguous. Eyes globose, internal margins rectilinear, forming V-shaped border; eyes partially recessed into head. Ocelli on line distinctly anterior to eyes, twice as far apart as their distance from eyes. Antenniferous tubercles scarcely visible from above. Antennae five-segmented; segments progressively longer toward fifth; first antennal segment not attaining the apex of head. Bucculae low, uniform in height, subparallel anteriorly, slightly diverging posteriorly, and ending abruptly near base of head. Buccular canal narrow and shallow.

Rostrum long, thin, reaching at least sixth abdominal sternite; segment I attaining procoxae; segment II arcuate, bilaterally compressed, shorter than segments III and IV combined.

Pronotum subtrapezoidal, about twice as wide across the humeri as long medially; anterior margin wider than head through eyes, arcuately excavated centrally, then obliquely truncate behind eyes; anterolateral angles somewhat acutely produced, reaching imaginary line passing through middle of eyes; anterolateral margins entire, sinuate; humeri slightly tumid, subcalloused, obtuse, and not produced; posterolateral margins oblique; posterior margin virtually straight; surface of disc rather even. Scutellum nearly tongue-shaped, reaching sixth abdominal tergite or slightly beyond. Frenum attaining scutellum at about two-fifths of its length; postfrenal lobe virtually as long as wide; side margins

of postfrenal lobe parallel, apex broadly rounded to subtruncate, lateral margins weakly reflexed. Hemelytra reaching end of abdomen. Membranal suture slightly sinuate in both sexes. Corium of male with external apical angle acute and posteriorly produced. Corium attaining apex of abdomen; membrane virtually as long as corium, apically truncate, with six or seven somewhat radiating veins; veins apically connected with lightly sclerotized, subapical crossbar. Corium of female with external apical angle less acute and less produced, projecting considerably beyond apex of scutellum, but far from attaining the apex of abdomen; membrane larger, apically rounded, surpassing or, at least, covering last abdominal tergite; membrane provided with approximately six longitudinal veins; veins occasionally bifurcated, not connected apically with transverse sclerotized bar. Connexivum narrowly exposed, postero-external angles rectilinear and barely produced; abdominal margin not conspicuously incised. Apical margin of seventh abdominal tergite in male bisinuate with median, broad and short obtuse lobe, slightly produced posteriorly.

Mesosternum barely tumid, with very thin, percurrent longitudinal carina which begins at mesosternal mid-length and extends over xyphus to posterior margin of metasternum. Metasternum hexagonal; anterior and posterior margins narrower than lateral margins. Mesocoxae and metacoxae equidistant. Tibiae plano-sulcate; margins feebly elevated. Texture of evaporative area scarcely distinguishable. Metapleural evaporatorium rugulose and punctate, occupying mesal three-fourths of segment. Lateral edge of evaporatorium rectilinear; ostiole opening ventrally in line with base of coxae; terminal lobe of peritreme moderately elevated, digitiform, partially polished, abruptly terminated apically, attaining half of width of plate.

Abdomen with well-defined median furrow extending to seventh sternite. Anterior margin of seventh abdominal sternite in male produced forward into acute angle not quite reaching middle of abdominal disc; median length of segment about twice as long as its marginal length. Pair of trichobothria very close to each other, transversely arranged midway between spiracles and external margin of body, posteriorly adjacent to weakly impressed pseudosuture.

**MALE GENITALIA:** Pygophore with a pair of symmetrical, laterally situated extensions (parandria), which are large, stout, and divergent. Pygophore with dorsal border strongly reflexed inward medially; sides of ventral border with a pair of recurved apophyses between parandria and parameres. Parameres surpassing by far ventral margin of pygophore, approximately as large as parandria. Tenth segment (anal tube)

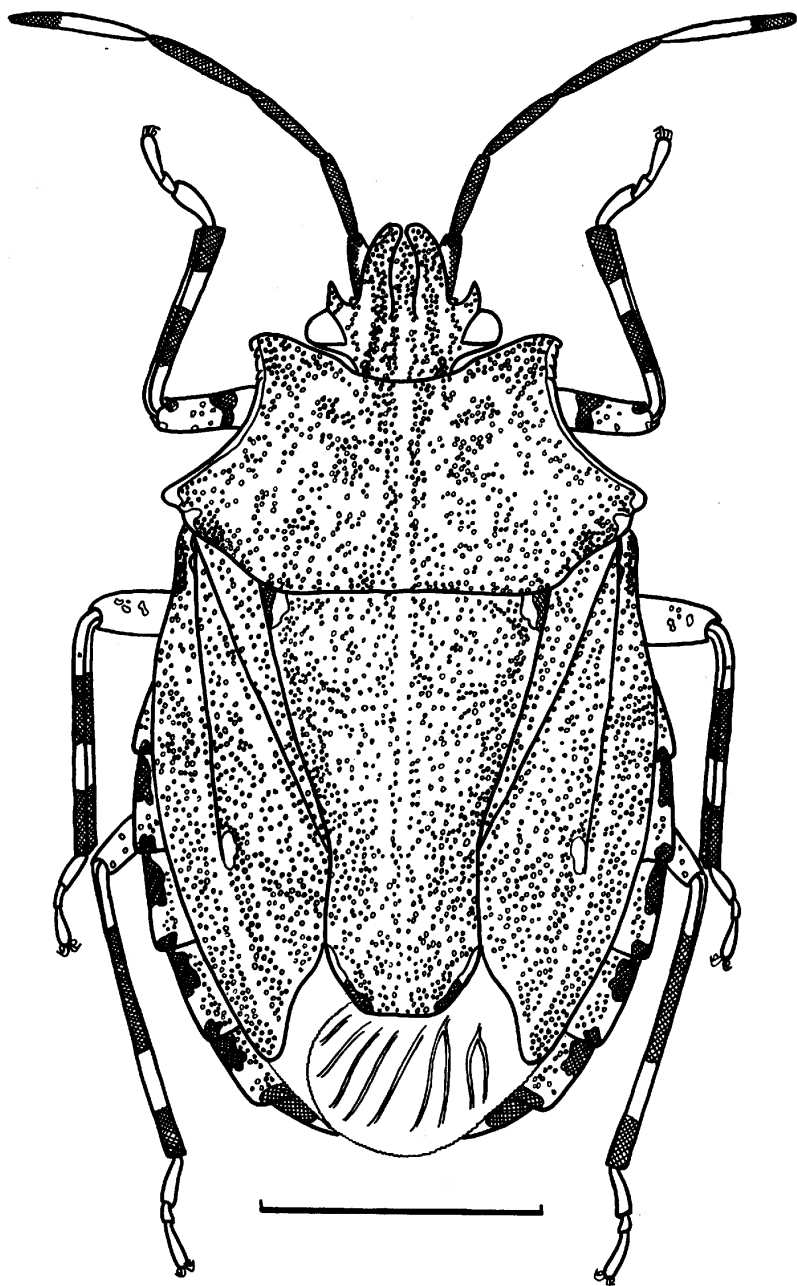


FIG. 1. *Sympiezorhincus tristis* Spinola, male. Dorsal view. (Scale equals 5 mm.).

basally with excrescence on either side. Phallus: phallosome subcylindrical, widely open distally, with pair of protuberant basal processes on dorsal side (processus phallosomae). Conjunctiva with one or more different kinds of processus conjunctivae. Ejaculatory reservoir bulky, occupying most of lumen of phallosome. Vesica heavily sclerotized along passage of ductus seminis; vesica with processes of one or more types. Course of ductus seminis represented in figures 19 and 20.

**FEMALE GENITALIA:** External genitalia of the genital plates type. Sternite VII with posterior border sinuate, area adjacent to gonocoxites VIII concave. Posterior borders of gonocoxites VIII sinuate; external posterior angles convex in relation to general outline of gonocoxites; lateral borders covering internal angles of laterotergites VIII. Laterotergites IX virtually as long as laterotergites VIII. Posterior borders of laterotergites VIII forming continuous and moderately convex outline. Laterotergites VIII united posteriorly by narrow bridgelike band, which is dorsal to segment X. Laterotergites IX meeting in midline posteriorly above anus. Segment X (anal tube) with segment XI (anus) telescoped. Gonapophyses VIII fusing on midline, forming triangulum (Verhoeff, 1893). Triangulum transversely semicircular, weakly sclerotized. Gonocoxites IX fusing on midline, forming narrowly transversal sclerite (pseudosternite Dupuis, 1951), constricted on middle area adjacent to segment X. Gonapophyses IX fusing on midline, forming thinly sclerotized sclerite on dorsal wall of pars communis, in front of orificium receptaculi. Ectodermal genital ducts: dorsal wall of pars communis very distended next to gonocoxites IX. Orificium receptaculi surrounded by thickenings of vaginal intima (Pendergrast, 1957). Dorsal vaginal glands represented by the Chitinellipsen (Verhoeff, 1893). Receptaculum seminis: capsula seminalis globose, bearing three hooklike expansions. Pars intermedialis limited by posterior and anterior flanges. Ductus receptaculi with intermediate area and complex dilation consisting of three layers with different degrees of sclerotization, resulting from invagination of apical within more proximal parts of ductus receptaculi (Pendergrast, 1957). Intermediate wall slightly tapering toward anterior area of duct. External wall very thin, membranous, and saclike. Single-walled areas of ductus receptaculi with anterior region twice as long as posterior region.

**DISTRIBUTION:** Brazil, French Guiana, Paraguay.

**REMARKS:** *Sympiezorhincus* Spinola is similar to *Agacritus* Stål in its narrowly hexagonal metasternum which is provided with a low, thin, median raised line, in its mutually equidistant metacoxae and mesocoxae, in the relative length of the antennal segments, in the sinuate anterolateral

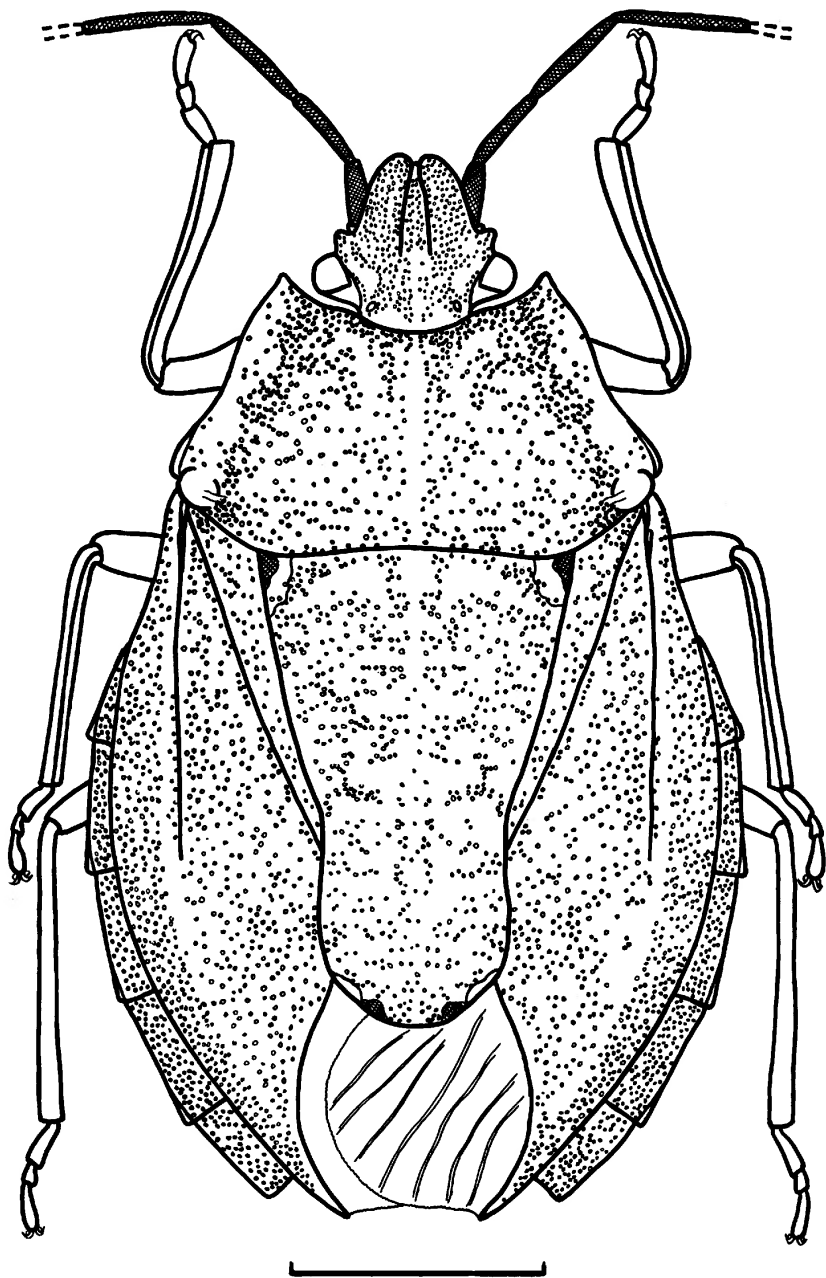


FIG. 2. *Sympiezorhincus punctipes* Dallas, female. Dorsal view. (Scale equals 5 mm.).

margins of the pronotum, and in the shortened and truncated hemelytral membrane of the male. It can be easily distinguished from *Agaclitus* Stål by the presence of an anteocular spinous process, by the absence of a prominent basal tubercle on the scutellum, and by its humeri which are not at all stoutly and acutely produced.

*Sympiezorhincus tristis* Spinola

Figs. 1,3,5,7,9,11,12,15,16,19

*Sympiezorhincus tristis* SPINOLA, 1837, p. 286. HERRICH-SCHAEFFER, 1844, p. 47. STÅL, 1864, p. 52; 1872, p. 9. LETHIERRY AND SEVERIN, 1893, p. 87. KIRKALDY, 1909, p. 219.

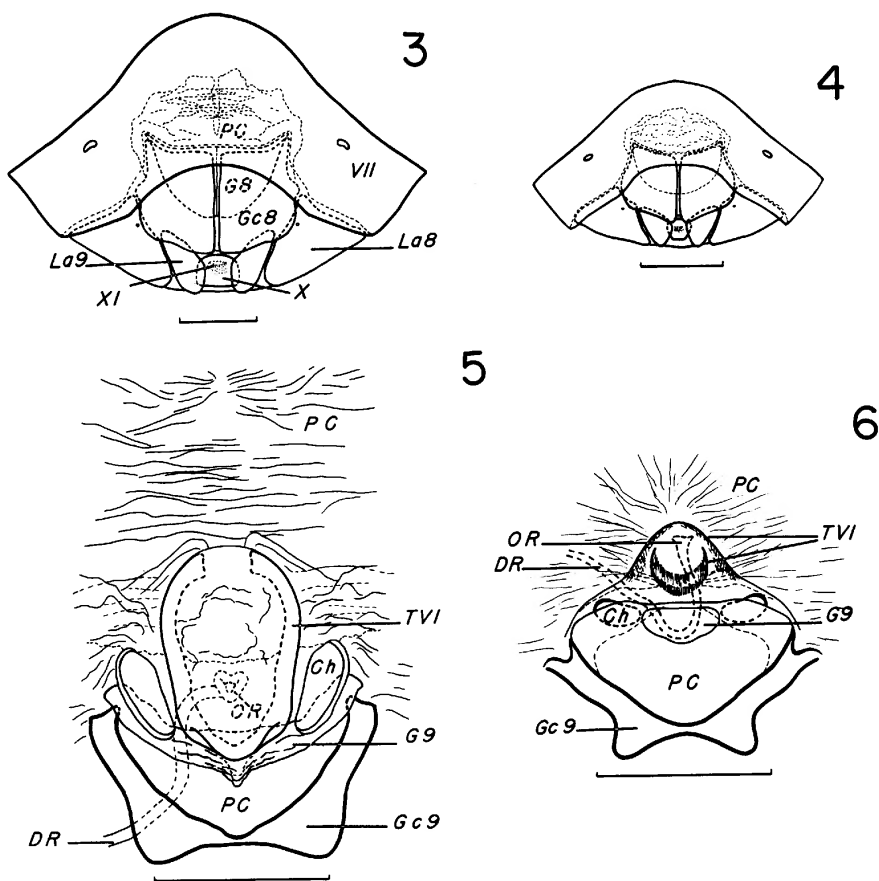
*Rachava orbicularis* AMYOT AND SERVILE, 1843, p. 115, pl. 12, fig. 13.

Large, distinctly obovate, much wider across abdomen than across posterolateral angles of pronotum. Over-all color brownish tan, with unevenly distributed black and fuscous punctures; anterolateral margins of pronotum with broad ochraceous band both above and beneath.

FEMALE: Total length including membrane 21.5 mm.; width through fourth abdominal segment, 12.8 mm.

HEAD: Total length, 3.6 mm.; width across eyes, 4.1 mm.; anteocular length, 2.0 mm.; anteocular width, 3.0 mm.; interocellar width, 1.4 mm.; distance between ocellus and eye, 0.5 mm. Anteocular process almost equilaterally triangular, attaining half of width of eye. Punctures on head finer than on remaining parts of body. Antennal segments fuscous; segments IV and V missing in specimen examined. Length of antennal segments: I, 1.3 mm.; II, 1.6 mm.; III, 2.0 mm. Length of rostral segments: I, 2.1 mm.; II, 4.7 mm.; III, 3.6 mm.; IV missing.

PRONOTUM: Length through median line, 5.0 mm.; width across anterolateral angles, 5.7 mm.; width across posterolateral angles, 10.3 mm. Anterolateral margins subcarinate, sinuate, diverging posteriorly, with broad ochraceous, virtually impunctate band extending from point next to external margin of eyes through posterolateral angles of pronotum, including humeri. Pronotum with rather numerous small and medium-sized punctures; punctures denser on area adjacent to ochraceous band and lacking on narrow longitudinal median line. Scutellum: length through midline, 9.5 mm.; width across basal angles, 6.1 mm.; length of postfrenal lobe, 3.6 mm.; width of postfrenal lobe, 3.5 mm. Punctures coarser on basal third of scutellum; basal angles with flavescent spot; subapical reflexed area brownish. Hemelytral membrane distinctly surpassing apex of abdomen. Connexivum minutely and closely punctate with black; external apical angles with small flavescent subcalloused spot.



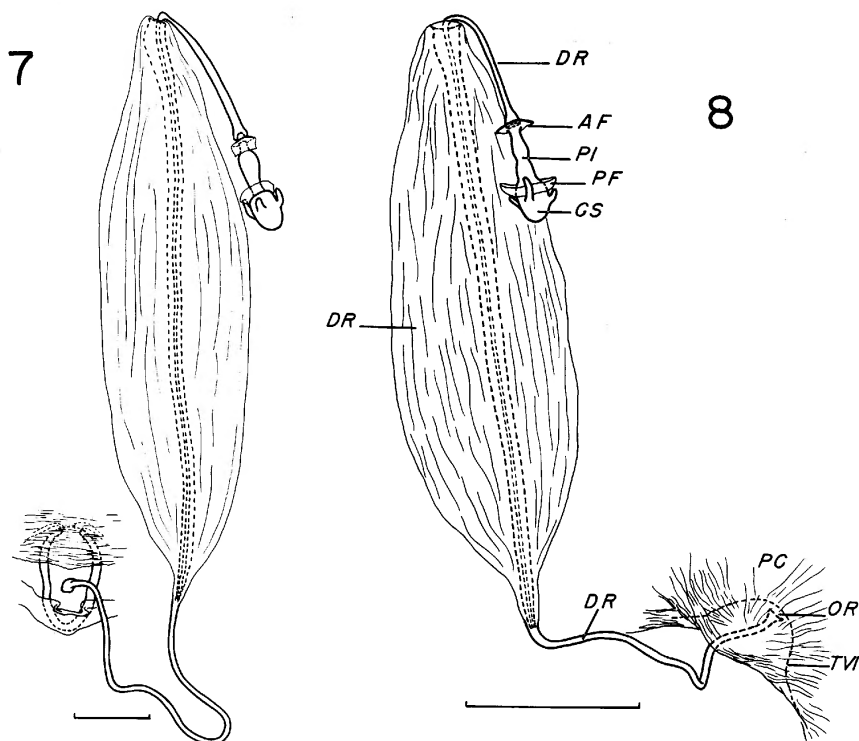
FIGS. 3, 4. Female external genitalia, ventral aspect. 3. *S. tristis*. 4. *S. punctipes*. (Scale equals 2 mm.).

FIGS. 5, 6. Gonocoxites 9 and gonapophyses 9. 5. *S. tristis*. 6. *S. punctipes*. (Scale equals 1 mm.).

*Abbreviations:* VII, sternite 7. La 8, laterotergite 8; La 9, laterotergite 9; X, tenth abdominal segment; XI, eleventh abdominal segment = anus; Gc 8, gonocoxite 8; G 8, gonapophysis 8; PC, pars communis; Gc 9, gonocoxites 9; G 9, gonapophysis 9; Ch, Chitinellipsen; TVI, thickenings of vaginal intima; OR, orificium receptaculi; DR, ductus receptaculi.

Ventral margin of head ivory flavescent, virtually lacking punctures, similar to ventral margin of pronotum and ventral side of costa. Abdomen closely spotted with blackish brown dots; central abdominal furrow for most part impunctate; seventh sternite with a narrow lenticular fuscous spot on median line. Legs brownish; femora densely blotched



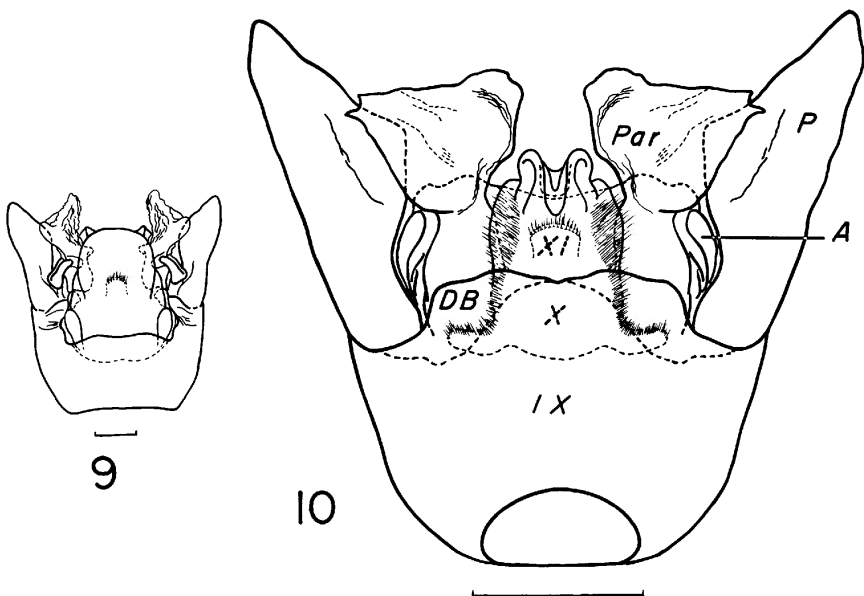


FIGS. 7, 8. Ectodermal genital ducts. 7. *S. tristis*. 8. *S. punctipes*. (Scale equals 1 mm.).

Abbreviations: CS, capsula seminalis; PI, pars intermedia; PF, posterior flange; AF, anterior flange; DR, ductus receptaculi.

with darker spots.

**FEMALE GENITALIA:** Gonocoxites VIII much more elevated along sutural borders than on remaining areas, their surfaces inclined toward lateral margin. Segment X semispherical. Triangulum with suture along median longitudinal line (fig. 3). Gonocoxites IX almost U-shaped, conspicuously constricted at middle. Gonapophyses IX represented by narrow, straplike sclerite covering inner angles of gonocoxites IX, lying adjacent to thickening of vaginal intima (fig. 5). Ectodermal genital ducts: vagina walls thickly membranous, variously folded. Orificium receptaculi surrounded by incomplete, thickly sclerotized ring on dorsal wall of the pars communis. Chitinellipsen present on either side of thickening of vaginal intima. Ductus receptaculi expanded at dorsal wall of vagina. Pars intermedialis not constricted at mid-length (fig. 7).



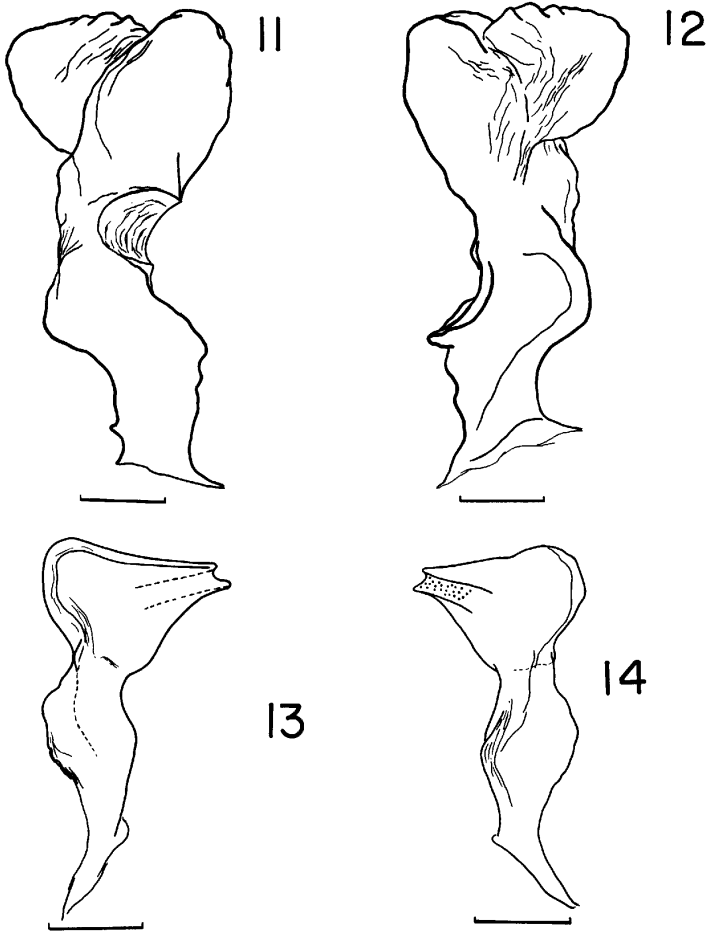
FIGS. 9, 10. Pygophore, dorsal aspect. 9. *S. tristis*. 10. *S. punctipes*. (Scale equals 1 mm.).

Abbreviations: IX, ninth abdominal segment; DB, dorsal border of pygophore; X, tenth abdominal segment=anal tube; P, parandria; Par, paramere; A, apophysis.

MALE: Specimen examined smaller than female. Similar to female, except for hemelytra which are as described for genus, and for abdomen which is infusate owing to the numerous agglutinating fuscous dots (fig. 1).

Total length, 19.9 mm.; width across abdominal segment IV, 12.5 mm. Total length of head, 3.7 mm.; width across eyes, 3.9 mm.; length of anteocular part of head, 1.9 mm.; anteocular width, 3.0 mm.; interocellar distance, 1.5 mm.; space separating ocellus from the eye, 0.5 mm. Length of antennal segments: I, 1.1 mm.; II, 1.7 mm.; III, 2.0 mm.; IV, 2.5 mm.; V, missing. Length of rostral segments: I, 2.2 mm.; II, 4.9 mm.; III and IV missing. Total length of pronotum, 4.4 mm.; width across anterolateral angles, 5.0 mm.; width across posterolateral angles, 9.5 mm. Total length of scutellum, 9.2 mm.; width across basal angles, 6.1 mm.; postfrenal length, 3.6 mm.; postfrenal width, 3.6 mm.

MALE GENITALIA: Parandria as long as remaining portion of pygophore. Lateral edges of ventral border of pygophore with bilateral, digitiform, recurved apophysis directed obliquely entad and extending



FIGS. 11-14. Parameres. 11. *S. tristis*, dorsal aspect. 12. *S. tristis*, ventral view. 13. *S. punctipes*, dorsal aspect. 14. *S. punctipes*, ventral view. (Scale equals 0.5 mm.).

beyond base of paramere. Tenth segment globose, its apical portion strongly deflexed (fig. 9). Distal portion of paramere consisting of two wrinkled blades; innermost blade semi-elliptical, joining outermost at approximately right angles. Middle area of paramere externally quite deeply excavate in dorsal aspect (figs. 11, 12). Phallus: dorsal connectives of articulatory apparatus more slender than ventral ones. Basal plates produced toward ventral connectives, resulting in H-shaped appearance. Basal plates recurved ventrally. Ponticulus basilaris in shape

of narrow straplike band (figs. 15, 16). Conjunctiva surrounding distal aperture of phallotheca, bearing pair of long, slender, almost membranous appendages on ventral side of phallotheca (processes conjunctivae 1) and half-collar shaped process extending from one side to other, through dorsum of phallotheca (processus conjunctivae 2). Vesica with pair of protuberant appendages situated on dorsum of phallus, just above processus conjunctivae 2 (processus vesicae). Vesica large and recurved, tapering toward secondary gonopore, with membranous involucre inflated toward behind at area of vesica situated between pair of processus conjunctivae 1 (figs. 15, 16, 19).

TYPE LOCALITY: Brazil.

Type deposited at Castelo di Tassarolo, Genoa.

DISTRIBUTION: Brazil, French Guiana, Paraguay.

SPECIMENS STUDIED: Avanhandava, São Paulo, Brazil, 1910 (E. Garbe), one female, in the Department of Zoology, São Paulo, Brazil; Horqueta, Paraguay, XI/17/1933, one male, in the American Museum of Natural History.

*Sympiezorhincus punctipes* Dallas

Figs. 2,4,6,8,10,13,14,17,18,20

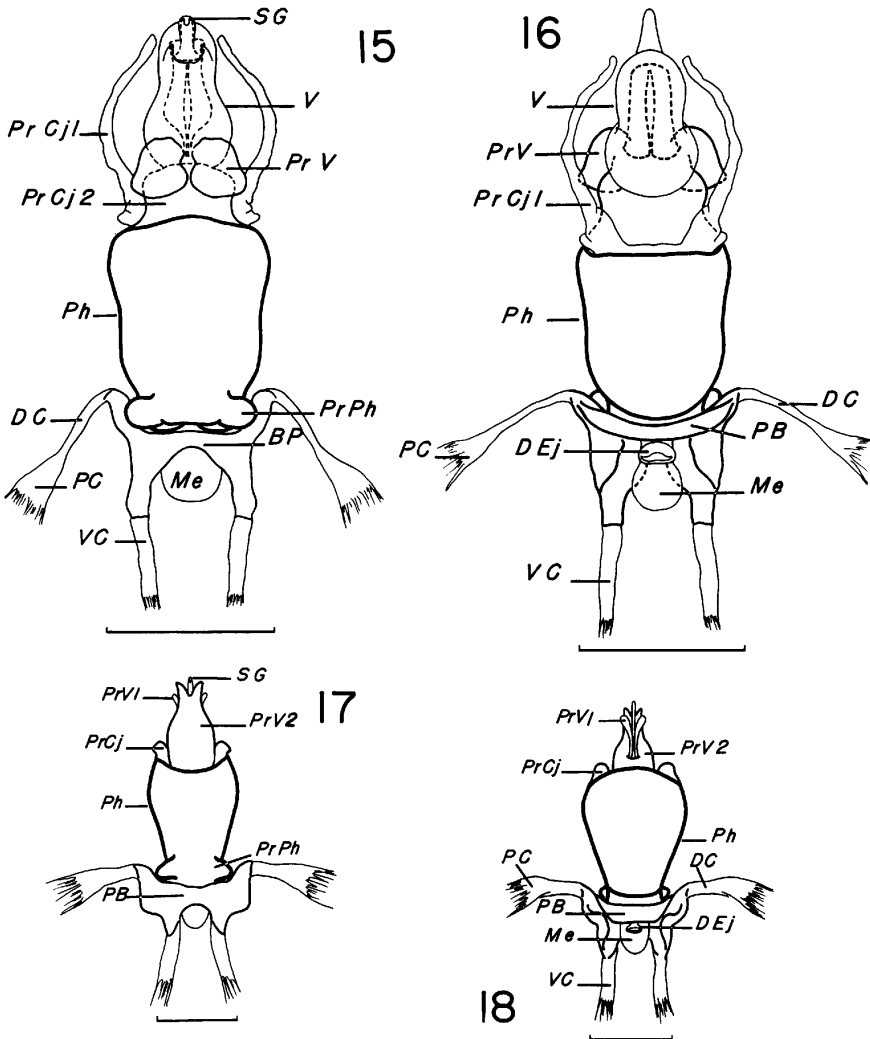
*Sympiezorhincus punctipes* DALLAS, 1851, p. 159, pl. 4, fig. 2. STÅL, 1872, p. 9. LETHIERRY AND SEVERIN, 1893, p. 87. KIRKALDY, 1909, p. 219.

Testaceous, with numerous fuscous and black punctures. Pronotum with anterolateral margins concavely arcuate. Connexivum alternated black and yellow.

FEMALE: Total length, 15.6 mm. (15.2–16.3); width across abdominal segment IV, 9.52 mm. (9.0–10.0) (fig. 2).

HEAD: Total length, 2.9 mm. (2.7–3.0); width across eyes, 3.53 mm. (3.4–3.7); anteocular width, 2.56 mm. (2.2–2.8); anteocular length, 1.54 mm. (1.5–1.6); interocellar width, 1.08 mm. (1.0–1.1); distance between ocellus and eye, 0.48 mm. (0.45–0.50). Anteocular spine anteriorly directed, attaining one-third of anteocular length of head. Punctures of head more numerous on two lines that parallel clypeus and continue onto ocelli. Antennal segments II, III, and IV completely infuscated; segment I with ivory blotch on dorsal surface, segment V ivory on basal three-fourths and dark apically. Length of antennal segments: I, 0.94 mm. (0.8–1.0); II, 1.44 mm. (1.4–1.5); III, 1.64 mm. (1.5–1.8); IV, 2.08 mm. (2.0–2.2); V, 2.44 mm. (2.3–2.5). Length of rostral segments: I, 1.74 mm. (1.5–1.9); II, 3.46 mm. (3.3–3.5); III, 2.79 mm. (2.6–3.1); IV, 2.06 mm. (1.9–2.2).

PRONOTUM: Length through median line, 1.08 mm. (1.0–1.1); width



FIGS. 15-18. Phalli. 15. *S. tristis*, dorsal aspect. 16. *S. tristis*, ventral view. (Scale equals 1 mm.). 17. *S. punctipes*, dorsal aspect. 18. *S. punctipes*, ventral view. (Scale equals 0.5 mm.).

**Abbreviations:** BP, basal plates; DC, dorsal connective; PC, processus capitati; VC, ventral connective; DEj, ductus ejaculatorius; Me, Membranblase; PB, ponticulus basilaris; Ph, phallotheca; PrPh, processus phallothecae; V, vesica; PrV, processus vesicae; PrV 1, processus vesicae 1; PrV 2, processus vesicae 2; PrCj, processus conjunctivae; PrCj 1, processus conjunctivae 1; PrCj 2, processus conjunctivae 2; SG, secondary gonopore.

across posterolateral angles, 5.38 mm. (5.0–5.7); width across anterolateral angles, 8.54 mm. (8.1–9.0). Anterolateral margins concavely arcuate, almost forming segment of a circle; humeral area feebly emarginate. Punctures on pronotum coalescent near humeri, tending to form longitudinal bands over pronotum, and leaving impunctate percurrent median linea which extends through scutellum. Anterolateral margins of pronotum narrowly bordered with yellow. Scutellum: total length, 7.4 mm. (7.2–8.0); width across basal angles, 5.3 mm. (5.1–5.7); postfrenal length, 2.96 mm. (2.8–3.0); postfrenal width, 2.87 mm. (2.7–3.0). Basal angles of scutellum each provided with calloused, flavescent narrow band entad of a piceous area; subapical reflexed portions yellow anteriorly and black posteriorly.

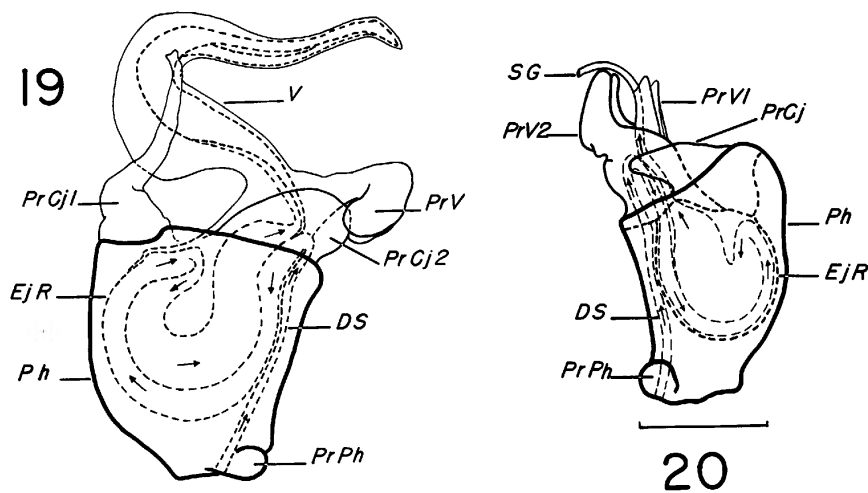
Hemelytra densely punctate; basal area of costa bearing piceous blotch; membranal suture narrowly edged with yellow; external apical angle of corium attaining middle of sternite VII; hemelytral membrane just covering apex of abdomen. Connexivum yellowish tan, with fuscous blotches next to segmental sutures, producing alternating pattern.

Pleurae closely punctate. Abdomen covered by piceous dots and black punctures, more numerous toward lateral thirds. Sternite VII with triangular fuscous blotch on median area. Femora spotted with blackish brown dots, and with an incomplete anteapical black annulus.

FEMALE GENITALIA: Gonocoxites VIII flat. Segment X pear-shaped. Triangulum very thinly sclerotized, without suture line along its fused borders (fig. 4). Gonapophyses IX represented by tenuous and relatively small sclerite situated on very distended area of dorsal wall of pars communis (fig. 6). Ectodermal genital ducts: dorsal wall of pars communis inflated around orificium receptaculi owing to presence of two different types of thickenings of vaginal intima; the anteriormost, which lies in front of gonapophyses IX, less sclerotized than posterior one and of semiannular shape; posterior sclerotization larger and blister-like. Chitinellipsen anterior to orificium receptaculi, lying on either side of gonapophyses IX. Pars intermedialis of receptaculum seminis constricted at mid-length (fig. 8).

MALE: Similar to female, but smaller and having hemelytra as described for genus.

TOTAL LENGTH: 14.2 mm. (13.3–15.4); width across fourth abdominal segment, 8.96 mm. (8.2–10.0); total length of head, 2.8 mm. (2.7–3.1); width across eyes, 3.36 mm. (3.2–3.7); anteocular length, 1.49 mm. (1.3–1.8); anteocular width, 2.35 mm. (1.9–2.8); interocellar distance, 1.01 mm. (0.95–1.1); distance between ocellus and eye, 0.42 mm. (0.35–0.5); length of antennal segments: I, 0.85 mm. (0.8–0.95); II, 1.39 mm.



FIGS. 19, 20. Ductus seminis and Aussenwand, lateral aspect. 19. *S. tristis*. 20. *S. punctipes*. (Scale equals 0.5 mm.).

**Abbreviations:** PrPh, processus phallothecae; Ph, phallotheca; DS, ductus seminis; EjR, ejaculatory reservoir; V, vesica; PrV, processes vesicae; PrV 1, processus vesicae 1; PrV 2, processus vesicae 2; PrCj, processus conjunctivae; PrCj 1, processus conjunctivae 1; PrCj 2, processus conjunctivae 2; SG, secondary gonopore.

(1.3–1.6); III, 1.52 mm. (1.4–1.7); IV, 2.0 mm. (1.9–2.3); V missing in all specimens examined; length of rostral segments: I, 1.43 mm. (1.4–1.5); II, 3.2 mm. (3.1–3.3); III, 2.41 mm. (2.3–2.5); IV, 1.82 mm. (1.8–1.85); total length of pronotum, 3.57 mm. (3.2–4.15); width through posterolateral angles, 7.92 mm. (7.3–8.9); width through anterolateral angles, 4.86 mm. (4.3–5.7); total length of scutellum, 7.16 mm. (6.6–8.1); width across basal angles, 4.86 mm. (4.5–5.4); postfrenal length, 2.74 mm. (2.6–3.0); postfrenal width, 3.15 mm. (2.85–3.9).

**MALE GENITALIA:** Parandria much longer than remaining portion of pygophore. Apophysis gently recurved inward, not reaching basal portion of paramere. Tenth segment bilaterally setose, apically bicarinate, with a narrow, deep sulcus between carinae (fig. 10). Paramere much enlarged toward apex, twice as wide as on basal half; distal half with external apical angle bifid owing to presence of two parallel carinae; internal border convexly arcuate (figs. 13, 14). Phallus: basal plates of articulatory apparatus auricularly reflexed in ventral aspect. Conjunctiva with pair of lateral, subconical appendages at each side of vesica (pro-

cessus conjunctivae). Vesica with pair of alate appendages ventral to subapical tubular region of the vesica (processus vesicae 1). Dorsal process of vesica inflated, globose, apically partially divided into two lobes (processus vesicae 2). Vesical region enveloping ductus seminis with an approximately S-shaped course (figs. 17, 18, 20).

TYPE LOCALITY: Not specified in the original description; type locality designated here: Parintins, Northern Brazil.

Type deposited in British Museum (Natural History).

DISTRIBUTION: Brazil.

SPECIMENS STUDIED: Brazil: Benjamin Constant, Rio Javary, Amazonas, March 1-15, 1942 (A. Rabaut), five females, in the American Museum of Natural History; Benjamin Constant, Rio Javary, Alto Amazonas, June, 1942 (A. Rabaut), one female, in the American Museum of Natural History; Manacapuru, Amazonas, August 31, 1957 (Elias and Roppa), four males, three females, in the Department of Zoology, São Paulo, Brazil; Manaus, Amazonas, August 30, 1957 (Elias and Roppa), one female, Department of Zoology, São Paulo, Brazil; Northern Brazil, 1901 (E. Garbe), one male, in the Department of Zoology, São Paulo, Brazil.

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